AMENDMENTS TO THE SPECIFICATION

Please replace the final paragraph on page 3 (spanning lines 31-36) with the following:

Figure 4 shows the nucleic acid sequence for the γ2 chain cDNA and the derived amino acid sequence. Figure 4A is the full cDNA for the 5,200 base pair sequence, available from EMB/GenBank/DDBJ under the accession number Z15008 (SEQ ID NO: 12 and SEQ ID NO: 13). Figure 4B is the nucleotide (SEQ ID NO: 14) and derived amino acid sequence (SEQ ID NO: 15) of the alternative 3' end sequence from cDNA clones providing a sequence of 4,316 base pairs, available from EMB/GenBank/DDBJ under the accession number Z15009. (Kallunki, et al., 1992, *supra.*)

Please replace the first two paragraphs of page 11 (spanning lines 1-16) with the following:

PCR reactions on genomic DNA (50 μg) were carried out using the upstream primer 5'-TTCCTTTCCCCTACCTTGTG-3' (SEQ ID NO: 18) and the downstream primer 5'-TGTGGAAGCCTGGCAGACAT-3' (SEQ ID NO: 19), which are located in the intron 2 and exon 3 of LAMC2 respectively. PCR conditions were: 95 C, 5 min, followed by 94 C, 45 sec; 56 C, 45 sec; 72 C, 45 sec; for 35 cycles, and extension at 72 C for 5 min. PCR products were used for restriction analysis. 20 μL of PCR product obtained from genomic DNA was digested with TaqI for 2 hours (Boehringer Mannheim). Clevage products were electrophoresed (2.4 % agarose) stained and visualized under UV light.

Thus the methods allow for the screening of patients for mutations in the γ2 chain which correlate with H-JEB. As demonstrated, the results have identified a nonsense mutation resulting in a truncated γ2 chain, leading to severe H-JEB. This was further confirmed by specific amplification and restriction enzyme analysis of both the patient and relatives. Thus demonstrating the effective screening for and identification of, γ2 chain mutations which correlate with H-JEB. The methods are thus useful for diagnosis, prenatal screening, early screening and detection, as well as detailed examination of H-JEB. Furthermore, the results demonstrate the significance of the γ2 chain in forming proper cellular contacts.